THE FARMING WORLD.

HIGH-PRICED BACON.

Selection of the Best Breeds and Feeds for This Purpose.

There are two all-important matters connected with the bacon trade which are entirely in the hands of the farmers, and which ought to receive every attention, viz.: the breeding and feeding of pigs, says an exchange. Different breeds suit different localities, and while trying to impress upon the farmers the necessity of fresh blood and careful attention to breeding it may be well to warn them against attempting to introduce a new breed of pigs into a district. It is much the safer way for farmers to aim at the improvement of pigs which have been long bred in a district than to attempt to introduce new breeds.

While this is so, care ought to be taken in the selection and introduction from other districts of high-class male animals to develop the points essential in good pigs. Speaking generally, short, dumpy boars and sows ought to be avoided, as it will be found that extra length of body not only adds much to the weight of the carcass, but insures a larger proportion of lean meat to the gross weight. Every care ought to be taken to prevent consanguinity or close breeding. The evil effort of close breeding shows itself sooner in the case of pigs than in any other of our domestic animals, and therefore fresh blood is most essential. In practice it will be found that a well-shaped pig can be reared, fed and brought, in a shorter space of time, to a greater weight upon a smaller amount of food than a mongrel-bred one, while the bacon and hams cut from the carcass of a well-bred pig are superior in quality and command a higher price in the market. Even in the heavily stocked markets of the present day there is still "room at the top," and to-day there is still margin in the wholesale and retail markets between the price of ordinary bacon and hams and those classed as best quality.

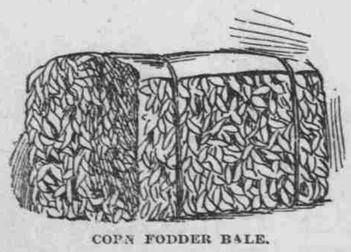
The flesh of pigs is soft if fed on brewery and distillery grains. Turnips and mangolds are unsuitable for producing good bacon. The following foods are suitable for producing good bacon: Potatoes (cooked), milk, barley meal, oatmeal and crushed oats, pollard bran, wheat (ground), rye meal, Indian corn (used sparingly), ground and cooked.

It is said that one of the principal reasons why Danish bacon has taken such a hold on the English market, and has been so profitable to the farmers in Denmark, is the fact that they have fed their pigs largely on separated milk. Nor is milk feeding a new idea. For generations the cottagers in Cumberland and Yorkshire have made a point of buying skimmed milk for their pigs for at least a month before they were killed for family use. Although seemingly an expensive food, the use of milk has been found to add to the flavor of the meat and also to prevent waste in cooking. When creamery separated milk is available it may be used fresh from the separators, but if it has to be carried, or kept over, it ought to be heated to a temperature of 180 degrees at the creamery immediately after it is separated.

BALED CORN FODDER.

In a Few Years It Will Be a Standard Farm Product.

The deficiency in the hay crop of 1895 has directed attention to corn fodder as a substitute. In spite of its having been repeatedly proved, many farmers still leave it in the field exposed to the weather, and then bemoan the fact that their stock eat it unwillingly. To prevent the hardening and toughening of the woody fibers of the plant, and to retain its palatability, corn fodder must be properly cured, like hay. It should then be cut or shredded before feeding. If a cutter is used the best length is from two and a half to three inches. Shorter lengths are apt to stand on end in the animal's mouth, thereby rendering it sore. Only small



CORN FODDER BALE.

quantities may be cut at a time, as there is danger of heating. The shredder has many advantages over the cutter. The most prominent are the absence of sharp edges, the lack of waste and the fact that it can be baled like hay. The latter has caused it to be shripped to the city in some quantity. Unfortunately, buyers ignorant of its true value have generally passed it by. This is the fate of all new things. But the day will soon come when the market prices of shredded corn fodder will be as regularly quoted as those of hay, for which it is a cheap and excellent substitute.—N. Y. World

Storing Sweet Potatoes.

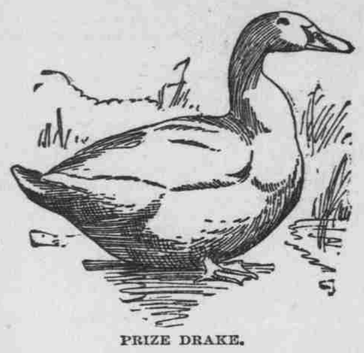
It is quite difficult to keep these vegetables through the winter, but it may be done if carefully attended to. They must be kept perfectly dry and not allowed to touch each other, or they will rot. The best way to keep them is to pack them in cut straw or chaff in barrels or boxes, and keep them in a room above ground. There are but few cellars where they can be kept to perfection. Sometimes they are wrapped in paper and packed without using chaff or straw. Others use dry sand as the packing material. The room in which they are put must be kept above the freezing point, and must be dry. If these conditions and precautions are kept in view, sweet potatoes may be kept until spring.—Farm and Fireside.

THE AYLESBURY DUCK.

Brief Description of a Breed Very Popular in England.

The breed takes its name from Aylesbury, England, where the duck rearing and fattening industry is carried on to an enormous extent. The whole district presents a most remarkable instance of poultry farming. Cottagers rear from 500 to 2,000 head a year, and there are plenty of large breeders. In no other part of the world are so many fowls raised on an equal area, and these birds all belong to the so-called Aylesbury breed, which is the favorite one throughout England.

The full-grown Aylesbury duck



PRIZE DRAKE.

is larger than the Pekin. It is generally considered more graceful, the body being long and well balanced, carrying its weight both forward and aft instead of merely the latter, like the American favorite. The plumage of the Aylesbury should be a spotless white, the legs of a deep orange hue, and the bill of a peculiar flesh-colored tint. The last is strongly insisted upon, and any birds whose bills are slightly off color will fail to bring the highest prices, even though otherwise without blemish. The reason for this prejudice is the general opinion that the flesh of the pure-bred Aylesbury is more delicately favored than that of any other kind.

Aylesbury ducks have degenerated somewhat in size in this country, owing to too much inbreeding; but by careful selection this tendency may be obviated. Where there is plenty of clear water so as to enable it to keep clean, this is a very valuable breed. The ducks are sociable, very easily tamed, and cross well with either Rouens or Pekins.—N. Y. World.

ABOUT AFTER-SWARMS.

A Beekeeper Tells of a Simple Way to Prevent Them.

The best way I know to prevent after-swarms is to have all the bees that can fly go with the first swarm, and this is the way I manage it: Have all the colonies strong, even if it should be necessary to double them up in the spring so that they will swarm at the beginning of the honey flow. Then hive the prime swarm on the old stand, removing the super, if any, from the present hive to the swarm; then set the parent hive on top of the swarm's hive and allow it to remain there two or three days. All the young bees that have been out of the hive, when they come out, will go in below with the swarm. About the afternoon of the second day, if the weather has been favorable, the parent colony will have become so depleted of bees that they will give up swarming a second time and will begin to carry out drone-brood. It is then safe to carry them to a new location; they will not swarm again, but will build up a strong colony, and will store some fall honey and be a good colony to winter. In this way we get extra strong colonies that will store more honey than the two together would if the queen-cells had been cut out. Crowd the brood chamber with bees instead of contracting it.—George W. Stephens, in Nebraska Queen.

AMONG THE POULTRY.

Nearly all of the nonsitting breeds lay white eggs.

Unusually large eggs denote that the hens are too fat.

One way of preventing gapes is to feed on a clean surface.

Do not try to keep too many. Hens that are crowded will not lay.

The earliest maturing fowl of the larger breeds is the Langshan.

If chicks are raised in a brooder care must be taken to keep the heat uniform.

Gather the eggs regularly now, otherwise they are liable to become frozen and broken.

Small flocks, well cared for, will give the best results. Fifty is as many as should be together.

When the hens are closely confined they will thrive better if they can have something to do.

In selecting young pullets for breeding take the early hatched. They will bring stronger, healthier chickens.

The fact should be kept in mind that the excess of food over what is required for maintenance and egg production will go to fat.

The purposes for which fowls are fed are several, and each purpose requires the food most naturally suited to it in order to secure the best results.—St. Louis Republic.

When to Water Horses.

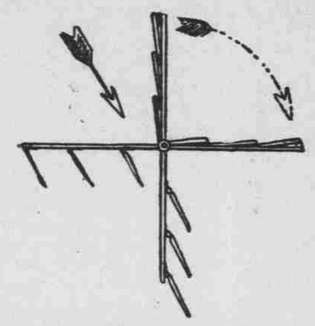
Always water your horses the first thing in the morning, and do not let the water be too cold. If it is too cold you will probably have a case of colic. Water is best when it is about ten degrees warmer than the outside air in winter, and as much cooler in summer. Give the hay before the grain, so that the stomach may be partially filled before the concentrated food gets into it. Better still feed chopped feed. Mix the ground grain with dampened hay or fodder, and give the largest feed at night, when the horse has time to digest it. Fat and food for the muscles are made when the horse is at rest.

FARM AND GARDEN.

WINDMILL NOVELTIES.

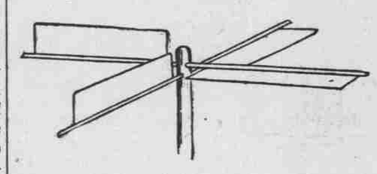
Two Recent Attempts to Improve on the Prevailing Styles.

The use of windmills for developing power in the rural districts is steadily increasing, and much thought is now being given to the possible improvement of existing designs. Herewith we rudely indicate the principles of two recent inventions. Dr. H. M. Shaw, of Genoa, N. Y., would have four horizontal arms of frames, to each of which he would attach, by hinges, one or more vertical sails, either entirely flat or made of slats, shutter fashion, whose angle with a perpendicular could be varied. The first diagram gives an idea of this plan. The solid arrow shows



the direction of the wind, and the dotted one the direction of rotation. It will be seen that as each set of sails come into the right position for work they slow down gently against the arm which supports them and carry it with them half way around the circle. The wind then penetrates under the free lateral edge of each and swings them all out backward, so that they offer no resistance as the arm comes up into the wind again. As yet, Dr. Shaw has not yet completed his model, but he believes that there will be no serious slamming as the sails suddenly swing back. Should there be trouble of this kind, however, he would interpose spring buffers to lessen the noise and destructive action consequent upon the battering of his shutters. An automatic regulator, not represented here, throws the sails out of action in a gale.

Another device, patented by a carpenter of Topeka, Kan., also has sails revolving in a horizontal plane, and is provided with means for keeping their edges to the wind when moving against the latter. Through a vertical shaft (which conveys the power obtained down to suitable transmitting mechanism) he runs two horizontal shafts, at right angles with each other. These shafts are arranged to rock, or undergo a partial rotation first in one direc-



tion and then in the other. To each half of a shaft is rigidly secured a blade or sail, in such a manner that when one of the pair stands upright the other will be lying down. A simple and ingenious attachment rocks these shafts and automatically raises and lowers the blades, according to the requirements of the service. The sails are "feathered" as a skillful boatman's oars are.

An important feature of the latter wind engine is that he has provided for the storage of power. The force developed by his machine operates so as to lift a heavily weighted platform. Any expenditure of this force tends to lower the burden. Elevation of the latter to its full height involves about half a day's work. Grist mills, pumps, dynamos and other mechanical or electrical devices dependent on the wind engine for power can be run for a few hours during a calm if the storage platform has been previously raised to the top notch, say, during the night.—N. Y. Tribune.

FACTS FOR FARMERS.

Lime on dry soils will show its effect at once and one application will show for years.

It is better to hold your corn, if you can. There is little use in selling at present prices.

If your hay is dusty wet it before giving it to horses. Dusty hay is a source of great injury to horses.

It is worth while to take extra pains to keep the rats out of the corn crib. It is a good plan to nail projecting tin around the edges.

Taking all things into consideration, the matted row system of growing strawberries is the most profitable, especially if care is taken not to let the plants grow too thick in the rows.

A St. Louis paper thinks that the corn crop has been over-estimated to the extent of 600,000,000 bushels. That is a pretty high figure, but that the crop has been over-estimated we do not doubt. Crop reports are nearly always exaggerated to keep prices down. The potato crop is also over-estimated in our judgment.—Farmers' Voice.

Leg Weakness in Fowls.

During this season there have been a very large number of complaints of leg weakness in fowls. Heretofore it has been very unusual. There are several causes of leg weakness, among them the feeding of sulphur. If sulphur is given in damp weather it acts almost as a poison, and affects the bones, causing pains in the limbs similar to rheumatism. We have experimented with its use and found the results as stated. Then again, dampness of the quarters conduces to leg weakness, and so will overfeeding. When the hens have good appetites, and appear well except unable to move freely, remove them from the male, as often his attentions are the cause of the difficulty.—Prairie Farmer.

HOG-HOISTING DEVICE.

Simply Indispensable for the Hauling of Heavy Animals.

A convenient device for hanging hogs is a valuable assistant in the handling of heavy animals. The accompanying illustration represents the principal parts of such a contrivance. Stout posts (a and b), seven or eight inches square, are firmly fixed in the ground about 16 inches apart, and stand ten feet or more in height. These are connected above by a hard-wood beam (c), three inches thick and ten inches in depth, mortised into the posts and held by pins or bolts. At f, near the post b, and directly over the platform upon which the hog has been made ready for hanging, a small pulley is suspended from the beam, using for this purpose an eye bolt passing through the beam but not above it. The frame of this pulley should be large enough that the hook on the end of the rope may be readily put through it or removed. A number of carriages similar to e are made to run on the beam. They consist of a hard-wood roller four inches in diameter and of about the same length, from which hangs a long iron loop inclosing the beam. This loop should be wide enough below, and extend downward far enough that the carriage may pass to the pulley at f. From the loop hangs a chain about 18 inches in length. Through the post a an opening is cut just below the beam, and a pulley (k) inserted, over which the rope is carried down to a windlass fixed on the post a few feet from the ground. A hanger (h) is provided for each carriage. In this a different length of stick may be used as a "spreader," thus adapting it to larger or smaller animals.

In working this device all the carriages to be used are transferred to the right end of the beam except one,

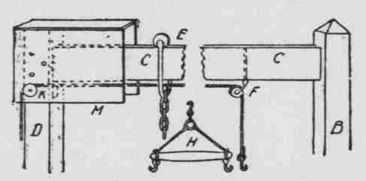


DIAGRAM OF APPARATUS FOR HOISTING HOGS.

which is brought into position on the left of the pulley, at f. The rope is passed through the loop of this carriage, over the pulley and downward, the hook at the end of the rope taking hold of the large ring of the hanger, which has been used as a gambrel. The carcass is raised to a proper height, when the hook at the top of the hanger is placed in one of the links of the chain suspended from the carriage. The rope is now withdrawn from the pulley at f and hung upon the carriage, and by the continued use of the windlass the hanging animal is borne away to the left. The second carriage is now brought to the left of the pulley, the rope rearranged, and the same operation repeated for the second animal. As it is important that the upper surface of the beam remain smooth and hard, it is protected when not in use by a board covering extending a few inches on either side, or the shelter box (m) for the carriages may extend from post to post.—American Agriculturist.

Quality Must Be Kept Up.

It is of the utmost importance that we maintain the quality of our live stock, and the only way to do this is to strive hard to improve it. Good beef never lacks demand either at home or abroad. In fact it is a potent influence in creating that "fellow feeling which makes a mortal wondrous kind." The Britisher has a warm spot in his heart for a good bit of American roast, though he may not tell about it, and the American epicure keenly relishes a bit of English mutton, well prepared, though he may not tell about it either. Our export trade in live stock and meats has reached enormous proportions. Our products, however, have to stand sharp competition in the world's markets, and in order to hold our own we have got to give close attention to the healthiness of our live stock and to its quality.—Farmers' Review.

Hens Need a Supply of Salt.

We have referred to the matter of furnishing salt for fowls in these columns once or twice, and expressed our belief that the moderate use of this condiment is beneficial. Now we find that by experiment in the New York experiment station it has been demonstrated that the use of salt at the rate of one ounce to 100 hens each day is beneficial, and at the trials the hens that were fed salt produced more eggs than those that were fed without salting their feed. It has been our practice to salt all soft feed given to our poultry, at about the rate food for human use is salted. This, we believe, is about the proper condition in which to give it, and that benefit will result we are confident.—Farm and Fireside.

Single or Separate Houses.

A long house, with apartments all under one roof, with a wide passageway, is a very convenient arrangement for a large flock (that is, each flock to have a house separated from the others), also possesses some advantages. If lice get into a large house it will not only be more difficult to rid the premises of them, but the attack upon the flock will necessarily cause all the others to be liable. With the single house plan the lice can more easily be subdued, as one may contain lice while the others are exempt. We call attention to this matter because there is something else to consider in a poultry house other than its arrangement, and that is its liability to attack from vermin.—Prairie Farmer.

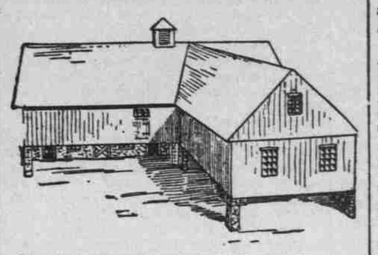
Whether to burn over the stubble or not before plowing is a question that is asked. If in a region where there is enough rain to rot the stubble there is no need of burning, except to kill insects. Where there is not enough rain to do this it should be burned.

AGRICULTURAL HINTS.

SPLENDID BANK BARN.

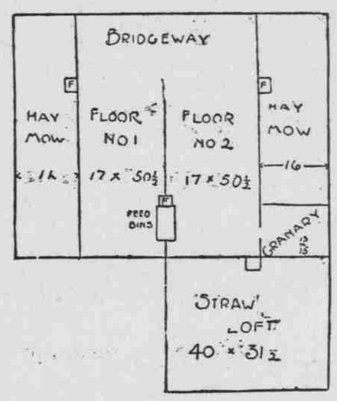
The Style Most Popular Among the Farmers of Pennsylvania.

It is an old saying that settlements of Pennsylvania Germans ("Dutch") may be known by their red barns and small houses. This is true of the barns, and, while the houses are not so large as the barns, they are always substantial and well furnished. The accompanying plans of a type of bank barn quite common in the central portion of the state. The size given is intended for a farm of 100 acres. The length of the



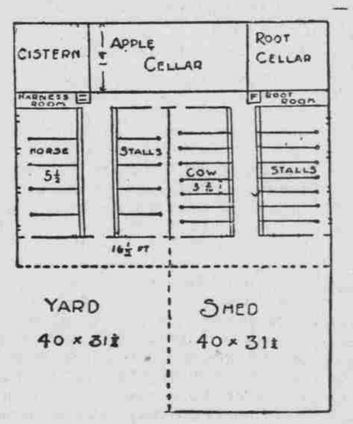
PENNSYLVANIA BANK BARN.

main structure is 65 feet, with a width of 60½ feet, there being an overshoot of 16½ feet in front. The shed for straw is 40 by 30½ feet. The basement or stable walls are built of stone, and are 10 feet to the floor above. The basement is furnished with large windows on three sides and will conveniently stable ten horses and 16 cows, besides giving space for a large cistern, apple cellar, root cellar, harness-room and root-room. This basement is entirely above ground, the earth being entire-



ly removed from three sides, and only remaining on that side from which the second floor is reached. This arrangement gives at once warm and dry stables, which are well lighted and well ventilated. The ventilators are along the whole front of the stables, immediately under the barn floor and out under the overshoot. There is an unobstructed view over the whole basement, no high racks being used.

The second floor contains two solid thrashing floors, each 17x50½ feet and



two hay mows each 16x50½ feet and 22 feet to the square. The arrangement of hay and straw funnels and of granary and feed bins is given in the cut, and will be found to be convenient for all purposes intended. The two haymows which, owing to their great height, hold a large amount of hay, are first filled. Then the wheat crop is placed on floor No. 1. The oats crop can be stored on overheads of floor No. 2 and on the wheat. When the crops are thrashed the machine is set on floor No. 2, and the straw passed directly into the straw loft, which is large enough to hold it all. Floor No. 1 may then be used for storing the cornfodder. The granary is conveniently situated for running the grain into the wagons below. Underneath the straw shed is ample space for storage of all manure until it is removed to the fields. The apple cellar may be used for storage of potatoes.

As planned this barn should face the east. If, however, conditions prevail which necessitate its facing the south, then the straw shed should be built to the other side of the barn, which will permit the morning sun to enter the stable yard and will also place the shed on the west, where it will serve as a protection from prevaining winds.—George G. Groff, in N. Y. Tribune.

Grasses in the South.

One good result of the enforced economy among southern planters is the matter of grasses. For a long time the south was regarded as unfit for grass production, although men here and there demonstrated its falsity. Mr. Hilyard, a northern man, but for many years a resident of the south, proved by actual and frequent experiments not only was this section a great grass country, but perhaps the greatest in the world. He showed that the south, in her more favored regions, surpassed the north in cultivation of the grasses and forage crops grown there, and that she had numerous plants of that kind which the north could not sucessfully produce. It has been proven by analysis, by facts and figures, that our Bermuda grass is far more nutritious than the famous timothy.—Augusta (Ga.) Chronicle.

DUCK RAISING PAYS.

Farmers Should Pay More Attention to This Lucrative Business.

A good many people are prejudiced against ducks, because of the notion that they make mud and are noisy, and are not as profitable as chickens. This is a great mistake, for ducks can be kept as easily and in as cleanly a manner as any other fowls, if they are furnished with proper quarters.

Pekin or Rouen ducks do not need water, except a plentiful supply to drink, and this can be furnished in such a way as to keep them from getting into it, as they surely will if they can. We always give our ducks a tub to bathe in, and when they have had their bath empty the tub for that day.

Ducks produce as many eggs as do hens, and in most of places their eggs sell for two cents a dozen more than hen's eggs, because of their greater size. If they have been well kept through the winter, they will begin to lay about the middle of February, and continue until they have produced about 15 dozen, when the old ones may be sold, leaving the spring hatch for next season's work.

Ducks will thrive on the coarsest kind of food, and the young are very hardy, as they are never bothered with lice or diseases of the kind that often attack young chickens. A duck once hatched is liable to live to maturity on food that a chick would die on in a week.

When sold ducks always sell for more by the pound than chickens do, and there is no reason to believe that a pound of duck costs more than a pound of chicken.

We have named Pekins and Rouens. The Aylesburys are just as valuable, but pure-bred ones are very rare, most of them having been crossed with Pekin blood.

We are very much in favor of the farmers paying more attention to ducks than they show a disposition to at this time.—Farm and Fireside.

ELECTRIC SOIL-TESTER.

Clever Invention for Determining the Amount of Moisture.

The well-known fact that damp earth is a better conductor of electricity than dry earth is the basis of an apparatus invented by Prof. Milton Whitney, chief of the division of soils in the agricultural department, which he thinks will be a valuable aid in producing the best results from the cultivation of soil. The plates, constructed of the material which forms the carbon points in arc lights, are sunk in the ground at any desired depth. A current of electricity is then passed from one to the other, and an instrument measures in ohms the resistance which the soil between the plates makes to the passage of the current. A table prepared from the results of many experiments shows at a glance the percentage of moisture in the soil.

The apparatus will be especially valuable in hothouse culture, in Prof. Whitney's opinion, for in that the conditions are best for regulating the proportion of moisture, but the amount of moisture in the fields can be regulated to a greater degree by cultivation. This is particularly so in sections of the country where irrigation is practiced. By the use of this apparatus, which is simple and comparatively inexpensive, the farmer can accurately determine what crop is best adapted to the soil of each field, and thus make his labor and investment count for the most in results. From a series of experiments conducted last summer Prof. Whitney has practically demonstrated that when pasture land shows less than one-third per cent. of moisture it has reached the danger line, and a severe drought is imminent.

SECURE FEED BOX.

An Excellent Contrivance for Keeping Poultry Food Clean.

Where soft food is given fowls, it is usually trampled upon by the fowls before fully eaten. To avoid this, make a shallow box and hinge to it a cover of slats made of laths. Through these the fowls can reach all the food, but cannot soil it. The same device may also be used with a smaller box for giving water. Have a box just large

SECURE FEED BOX.

enough to set the dish of water within, and shut the slat cover down over it. A similar device for giving water in a way to keep the fowls out of the water vessel is to have a moderately high box, with slats up and down one side. Then set the water dish within, and the fowls can drink through the slats. The top of the box or cover, should be sloping to keep the fowls off from it.—Orange Judd Farmer.

Hints About Marketing Honey.

There are a few points well worth knowing in the marketing of honey. The first thing necessary is to see that the honey is carefully assorted. Then it should be thoroughly cleaned and put into neat, white crates. Another very important thing is, the crates should be the same thing all through; that is, the honey should be just what it appears to be on the face of it. There is a great deal of talk nowadays about low prices and slow sales, but the man who has an honest, clean, first-class article of any kind need not go begging for customers, even in these hard times.—Farm and Home.

Much is written about warming water for cows. Seldom is anything said about not giving horses water that is too cold. It should never be too cold, and especially in the morning.—Farmer's Voice.